## Elevation corrections ...

cbblanke 38 posts since

Apr 18, 2008

Can someone explain the elevation corrections? As I understand, the model domain (lambert conformal in my case) has its own elevation file, and the forcing domain (are these always lat/lon?) has its own elevation map. (But what are elevation map change 1, 2, and 3 for GDAS, in lis.config?)

I see in lis.config that some variables for the forcing grid are defined for the various forcings (x and y dimensions) but not a lat/lon range. Are these always global? Or do they use one of the other domains?

Is turning it on in lis.config all you need to do to apply the elevation correction?

Thanks,

Clay

Tags: lis, forcing, domain, grid, elevation, correction

geiger 19 posts since

Sep 20, 2007 1. Re: Elevation corrections May 8, 2008 4:12 PM

Hello,

First, please note that you are running an old version of the code. The GDAS elevation files are no longer named "change 1", "change 2", etc. Please run "svn update" to update your code. Then look in the testcases/baseforcing/gdas directory to see how to specify the GDAS forcing section of lis.config.

The GDAS forcing domain has changed several times over the past few years.. That is why there are several elevation files for GDAS. LIS is able to determine which elevation file it needs.

To use elevation correction (for GDAS), you must set

Elevation data source:

Use elevation correction:

GDAS T170 elevation map:

GDAS T254 elevation map:

GDAS T382 elevation map:

Download the latest User's Guide from modelingguru for more information about the lis.config file.

The x and y dimensions specify the number or columns and rows that comprise that particular forcing data set.

Jim

cbblanke 38 posts since

Apr 18, 2008 2. Re: Elevation corrections May 9, 2008 10:34 AM

Elevation corrections ...

in response to: geiger How does LIS know the domain of the different base forcings? Do they match one of the domains in the lis.config file (parameter data?) or are they hard coded in the subroutine for that particular type of forcing?

sujay 118 posts since

Sep 20, 2007 3. Re: Elevation corrections May 9, 2008 10:43 AM

in response to: cbblanke The domain definition for each forcing type is defined in the defineNative\* function for each forcing type.

So for gdas forcing, please see the gdasdomain\_module and defineNativeGDAS functions.

-S